

WHAT IS CLAIMED IS:

1. A color image processing device comprising:
 - n line sensors which are arranged with a prescribed interval L between one another;
 - an image signal output unit which outputs image signals under a prescribed cycle from the line sensors;
 - a line memory which stores the image signals for a plurality of lines and outputs the image signals with a delay; and
 - a control unit which controls to input one of the image signals of a certain cycle into the line memory, and to output an image signal from the line memory by delaying a certain number of lines, in accordance with a prescribed rate of magnification N.
2. The color image processing device according to claim 1, wherein when P is a pixel pitch in a sub scanning direction during a scanning operation under 100% magnification, the control unit calculates a number of pixels which increases and decreases by the rate of magnification from $N \cdot L/P$, determines which cycle is to be selected in accordance with a decimal part d of the calculated number, and determines the number of delayed lines in accordance with an integral part D.
3. The color image processing device according to claim 2, wherein the control unit includes a table of the decimal part d and the selected cycle.
4. The color image processing device according to claim 1, wherein three line sensors are provided to scan an image of a Red (R) component, a Green (G) component, and a Blue (B) component respectively.

5. The color image processing device according to claim 4, further comprising:

an analog to digital converter which converts analog image signals output from each of the line sensors into digital image signals.

6. A color image processing device comprising:

means for scanning a line image provided in n-number of rows with a prescribed interval L between one another;

means for outputting image data from the means for scanning the line image under a prescribed cycle;

means for storing image data for a plurality of lines and outputting the image data with a delay; and

means for controlling to realize a prescribed rate of magnification N by inputting image data of a certain cycle into the means for storing, and outputting the image data from the means for storing by delaying a certain number of lines, wherein the prescribed cycle is a prescribed number of times of a cycle in which the image data is output from the means for storing.

7. The color image processing device according to claim 6, wherein when P is a pixel pitch in a sub scanning direction during a scanning operation under 100% magnification, the means for controlling calculates a number of pixels which increases and decreases by the rate of magnification from $N \cdot L/P$, determines which cycle is to be selected in accordance with a decimal part d of the calculated number, and determines the number of delayed lines in accordance with an integral part D.

8. The color image processing device according to claim 7, wherein the means for controlling includes a table of the decimal part d and the selected

cycle.

9. The color image processing device according to claim 6, wherein three means for scanning are provided to scan image of a Red (R) component, a Green (G) component, and a Blue (B) component respectively.

10. The color image processing device according to claim 9, further comprising:

means for converting analog image signals output from each of the means for scanning into digital image signals.

11. A color image processing method comprising:
setting a rate of magnification;
calculating a number of pixels $N \cdot L/P$ which increases and decreases by the rate of magnification for each of colors in accordance with the rate of magnification and a pixel pitch P in a sub scanning direction during a scanning operation under 100% magnification;

extracting an integral part D and a decimal part d of the number of pixels $N \cdot L/P$ for each of the colors;

determining a cycle to output image signals from line sensors for each of the colors in accordance with the decimal part d;

determining a number of delayed lines in a line memory for each of the colors in accordance with the integral part D; and

outputting the image signals from each of the line sensors in accordance with the determined cycle, and scanning the image signals of each of the colors from the line memory and outputting a color image signal of an original document in accordance with the determined number of delayed lines.

12. The color image processing method according to claim 11, further comprising:

selecting one of the colors as a standard;
calculating the number of pixels $N \cdot L/P$ for the other two colors;
extracting the integral part D and the decimal part d; and
determining the cycle and the number of delayed lines.

13. The color image processing device according to claim 1, further comprising shading correction circuitry for correcting shaded data.

14. The color image processing device according to claim 6, further comprising shading correction circuitry for correcting shaded data.

15. The color image processing method according to claim 11, further comprising correcting shaded data.

16. The color image processing device according to claim 1, wherein the rate of magnification is 50%.

17. The color image processing device according to claim 6, wherein the rate of magnification is 50%.

18. The color image processing method according to claim 11, further comprising scanning under a rate of magnification of 50%.

19. The color image processing device according to claim 1, wherein the rate of magnification is 200%.

20. The color image processing device according to claim 6, wherein the rate of magnification is 200%.